



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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FEB 13 2012

Ref: 8 EPR-N

Elizabeth G. Close, Acting Forest Supervisor
Manti-La Sal National Forest
U.S. Department of Agriculture, Forest Service
599 West Price River Drive
Price, Utah 84501

Re: Draft Environmental Impact Statement for
Sunroc Corporation Chicken Creek Gypsum Mine,
San Pitch Mountains, Juab County, Utah: CEQ#:
20110437

Dear Ms. Close:

In accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 433(2)(C) and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609, the U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the United States Forest Service's (USFS) Draft Environmental Impact Statement (DEIS) for the Sunroc Corporation (Sunroc) Chicken Creek Gypsum Mine, located in Chicken Creek Canyon on the western slopes of the San Pitch Mountains two miles east of the town of Levan, Utah. The EPA offers the following comments for your consideration.

This DEIS supplements the USFS's existing Plan of Operations for Chicken Creek East and Chicken Creek West Mine sites, to include additional USFS lands for surface mining that are not included in the currently approved plans and to combine the existing plans into a Large Mine Plan of Operations (Plan). The Plan proposes to: (1) mine additional claims on USFS lands to the Chicken Creek East and Chicken Creek West Mine sites, and (2) construct an access road and mine additional claims on USFS lands to the Upper Chicken Creek West area. The Plan would disturb 88.6 acres of USFS lands and 37.1 acres of private lands.

The DEIS includes three alternatives:

Alternative One: No Action. Under the No Action Alternative, Sunroc would not expand its mining operations on USFS lands and would continue its operations on the previously- approved mining areas.

Alternative Two: Proposed Action. Under Alternative Two, the USFS would approve the Plan

as submitted. This alternative includes a reclamation plan, revegetation plan, a Soil and Water Conservation Program (SWCP), wildlife habitat protection, in addition to Best Management Practices (BMPs) for mine operations and maintenance phases.

The Plan proposes a disturbance of 88.6 acres on USFS land (11.3 acres of existing disturbance on the West Mine plus 77.3 acres of future disturbance on the East and West Mines) as well as 37.1 acres on private land. The East Mine would have a mine life of approximately 128 years and the Lower West and Upper West Mine would result in a mine life of 26 years each (for a total of 52 years). The Secretary of Agriculture would need to concur on the activities that impact the Levan Peak Inventoried Roadless Areas (IRAs). Impacts within the IRA include the construction of 0.5 miles (1.6 acres) of road in the Levan Peak unroaded/undeveloped area and 36 acres of disturbance associated with the West Mine expansion.

As proposed, the Plan for the expansion of the mine into USFS lands requires a site specific Forest Plan amendment to change the visual resource designation of the area so that human activities may dominate the original landscape but their evidence must blend with the landscape's natural characteristic.

Alternative Three: Proposed Action with Mitigation Measures. Under Alternative Three, USFS would approve the Plan as described above, including the Forest Plan amendment to change the visual resource designation of the area, with additional criteria needed to protect other non-mineral surface resources.

In addition to the operational mitigation and post-operational reclamation criteria described in Alternative Two, Alternative Three would impose additional mitigation and reclamation criteria to address potential project resource impacts. Specifically, these criteria will provide further wildlife disturbance and habitat protections/mitigation (especially birds and mule deer), restrictions on vehicle operations to designated mine roads, noxious weed control during operations, record keeping for topsoil salvage to verify salvage amounts, annual ore production reports, and additional hydrogeologic study to be completed by Sunroc in addressing USFS concerns about water resources. This alternative will also reduce noise and dust effects on the nearby Hidden Valley subdivision significantly for the first 10 years by beginning quarry operations furthest from this subdivision. Alternative Three also limits the amount of disturbed un-reclaimed land to 12-25 acres compared to 60 acres for Alternative Two, thereby reducing visual impacts to the subdivision.

Following are EPA's key concerns and recommendations based on our review of the DEIS.

Water Resources

The DEIS acknowledges that blasting and land disturbance can alter flow paths that deliver groundwater to springs which are a potable water supply for the Town of Levan and result in decreased discharge rates to these springs. These potential impacts cause us to be concerned that the DEIS hydrogeological assessment lacks a complete assessment of the effects of mining on these springs. For example, the Sunroc hydrogeology report (IGES August 2011) focused on

impacts to the watershed and regional groundwater system, rather than the springs. The report also contains insufficient empirical data relative to groundwater flow and quality in the Arapien Formation, which is the source of water to both Tunnel Spring and Rosebush Spring. There is no depth to water or water quality data for the Arapien Formation. Without depth to water data, the direction of groundwater flow cannot be determined. Without background water quality data, there is no way to compare future water quality data to pre-mining water quality. This data is necessary to accurately predict the potential impacts to these springs from future mining.

Recommendations:

- The EPA recommends further analysis of mining impacts to the springs (water supplies) be performed and disclosed in the final EIS with recommendations for mitigation and a contingency water supply if necessary. Further analysis should include determination of depth of mining relative to the depth to water in the Arapien Formation and a focus on determining impacts to the springs rather than comparing the flows to the entire watershed. There is a need to install groundwater monitoring wells to determine the water table /piezometric surface configuration so groundwater flow direction can be determined. Finally, the capture zone associated with the spring discharge should be estimated and delineated.
- Since the future mine will occur within 750 feet of Rosebush Spring, the EPA recommends the USFS consider increasing the distance between the mine and this spring. Buffer zones are a well recognized BMP. The most effective distance would be determined in part based on more information about groundwater flow in the Arapien.

Air Quality

The EPA is concerned that the DEIS lacks disclosure of existing air quality conditions and emissions inventory. The machinery and operating equipment at a mine site create emissions, and the activities at a mine (excavating, blasting and crushing) create fugitive emissions. In addition, the proposed road construction will also decrease air quality because of the emissions from the equipment used and the fugitive dust created. Decision-makers need to understand baseline conditions in an effort to ensure that project activities, when combined with air quality impacts from external sources, do not adversely impact the National Ambient Air Quality Standards or Air Quality Related Values. While it is helpful to disclose that the State of Utah, Department of Environmental Quality has issued an air quality permit for the current mining operation, additional information is necessary for a thorough analysis.

Recommendations:

- The final EIS should disclose the current existing air quality conditions and all air quality related value environmental impacts.
- The EPA recommends that the final EIS provide an inventory of predicted emissions, including road construction emissions that would be associated with the mining activities, as well as a discussion of proximity to sensitive receptors. If emissions are substantial and/or in close proximity to sensitive receptors, such as population areas or federal Class

I areas, then the final EIS also should include an air impact analysis presenting direct, indirect, and cumulative impacts of these activities on sensitive receptors.

Environmental Justice

The DEIS does not appear to contain information regarding steps taken to coordinate with or letters of consultation with Tribal partners (Paiute Indian Tribe of Utah, Ute Indian Tribe and Hopi Tribe).

Recommendations:

The EPA recommends that the communications with Tribal partners be included in an appendix to the final EIS.

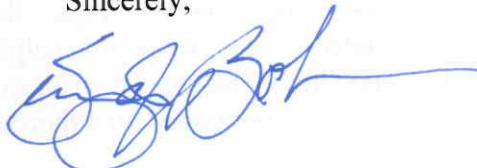
EPA Rating:

Because the USFS has not identified a preferred alternative, EPA is rating both of the action alternatives. EPA rates Alternatives Two and Three as "Environmental Concerns – Insufficient Information" or "EC-2." This rating indicates that our review has identified environmental impacts that should be avoided in order to fully protect the environment, and that the DEIS does not contain sufficient information for the EPA to fully assess environmental impacts.

We note that, although Alternative Three impacts to water resources necessitate the "EC" rating, this alternative incorporates important mitigation actions that significantly diminish the impacts of other resources project described in Alternative Two. Further, the EPA supports the conclusion of the USFS that these mitigation actions and measures substantially reduce resource impacts of the project by providing additional long term reclamation and monitoring.

We appreciate the opportunity to review and comment on this DEIS. If you have any questions regarding these comments, please feel free to call me at (303) 312-6925. You may also contact Robin Coursen of my staff at (303) 312-6695.

Sincerely,



Suzanne J. Bohan, Director
NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation

Enclosure:
EIS Rating System Criteria

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - - Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new, reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

